

Full Report (All Nutrients) 16069, Lentils, raw

Report Date: September 11, 2019 20:27 EDT

Nutrient values and weights are for edible portion.

Food Group : Legumes and Legume Products

Carbohydrate Factor: 4.07 Fat Factor: 8.37 Protein Factor:3.47 Nitrogen to Protein Conversion Factor:6.25

Nutrient	Unit	1 Value Per100 g	Data points	Std. Error	1 cup 192g	1 tablespoon 12g
Proximates						
Water 1 2	g	8.26	55	0.070	15.86	0.99
Energy	kcal	352	--	--	676	42
Energy	kJ	1473	--	--	2828	177
Protein 1 2	g	24.63	56	0.270	47.29	2.96
Total lipid (fat)	g	1.06	9	0.030	2.04	0.13
Ash 2	g	2.71	46	0.030	5.20	0.33
Carbohydrate, by difference	g	63.35	--	--	121.63	7.60
Fiber, total dietary	g	10.7	--	--	20.5	1.3
Sugars, total	g	2.03	--	--	3.90	0.24
Sucrose	g	1.47	3	0.030	2.82	0.18
Glucose (dextrose)	g	0.00	--	--	0.00	0.00
Fructose	g	0.27	3	0.120	0.52	0.03
Lactose	g	0.00	--	--	0.00	0.00
Maltose	g	0.30	3	0.100	0.58	0.04
Galactose	g	0.00	--	--	0.00	0.00
Starch 1 2	g	49.90	56	0.470	95.81	5.99
Minerals						
Calcium, Ca 1 2	mg	35	38	1.000	67	4
Iron, Fe 1 2	mg	6.51	38	0.550	12.50	0.78
Magnesium, Mg 1 2	mg	47	38	1.000	90	6
Phosphorus, P 2	mg	281	28	8.000	540	34
Potassium, K 1 2	mg	677	38	10.000	1300	81

Nutrient	Unit	1 Value Per100 g	Data points	Std. Error	1 cup 192g	1 tablespoon 12g
Sodium, Na	mg	6	4	1.000	12	1
Zinc, Zn 1 2	mg	3.27	38	0.120	6.28	0.39
Copper, Cu 2	mg	0.754	28	0.023	1.448	0.090
Manganese, Mn 2	mg	1.393	28	0.082	2.675	0.167
Selenium, Se 1 2	µg	0.1	38	0.006	0.2	0.0
Vitamins						
Vitamin C, total ascorbic acid	mg	4.5	--	--	8.6	0.5
Thiamin	mg	0.873	8	0.042	1.676	0.105
Riboflavin	mg	0.211	8	0.004	0.405	0.025
Niacin	mg	2.605	8	0.049	5.002	0.313
Pantothenic acid	mg	2.140	8	0.043	4.109	0.257
Vitamin B-6	mg	0.540	8	0.017	1.037	0.065
Folate, total	µg	479	8	24.000	920	57
Folic acid	µg	0	--	--	0	0
Folate, food	µg	479	8	24.000	920	57
Folate, DFE	µg	479	--	--	920	57
Choline, total	mg	96.4	--	--	185.1	11.6
Vitamin B-12	µg	0.00	--	--	0.00	0.00
Vitamin B-12, added	µg	0.00	--	--	0.00	0.00
Vitamin A, RAE	µg	2	--	--	4	0
Retinol	µg	0	--	--	0	0
Carotene, beta	µg	23	--	--	44	3
Carotene, alpha	µg	0	--	--	0	0
Cryptoxanthin, beta	µg	0	--	--	0	0
Vitamin A, IU	IU	39	--	--	75	5
Lycopene	µg	0	--	--	0	0
Lutein + zeaxanthin	µg	0	--	--	0	0
Vitamin E (alpha-tocopherol)	mg	0.49	1	--	0.94	0.06
Vitamin E, added	mg	0.00	--	--	0.00	0.00
Tocopherol, beta	mg	0.00	1	--	0.00	0.00
Tocopherol, gamma	mg	4.23	1	--	8.12	0.51
Tocopherol, delta	mg	0.00	1	--	0.00	0.00
Tocotrienol, alpha	mg	0.00	1	--	0.00	0.00

Nutrient	Unit	1 Value Per100 g	Data points	Std. Error	1 cup 192g	1 tablespoon 12g
Tocotrienol, beta	mg	0.00	1	--	0.00	0.00
Tocotrienol, gamma	mg	0.00	1	--	0.00	0.00
Tocotrienol, delta	mg	0.00	1	--	0.00	0.00
Vitamin D (D2 + D3)	µg	0.0	--	--	0.0	0.0
Vitamin D	IU	0	--	--	0	0
Vitamin K (phylloquinone)	µg	5.0	--	--	9.6	0.6
Lipids						
Fatty acids, total saturated	g	0.154	--	--	0.296	0.018
4:0	g	0.000	--	--	0.000	0.000
6:0	g	0.000	--	--	0.000	0.000
8:0	g	0.000	--	--	0.000	0.000
10:0	g	0.000	--	--	0.000	0.000
12:0	g	0.000	--	--	0.000	0.000
14:0	g	0.003	--	--	0.006	0.000
16:0	g	0.136	--	--	0.261	0.016
18:0	g	0.015	--	--	0.029	0.002
Fatty acids, total monounsaturated	g	0.193	--	--	0.371	0.023
16:1 undifferentiated	g	0.003	--	--	0.006	0.000
18:1 undifferentiated	g	0.184	--	--	0.353	0.022
20:1	g	0.006	--	--	0.012	0.001
22:1 undifferentiated	g	0.000	--	--	0.000	0.000
Fatty acids, total polyunsaturated	g	0.526	--	--	1.010	0.063
18:2 undifferentiated	g	0.414	--	--	0.795	0.050
18:3 undifferentiated	g	0.112	--	--	0.215	0.013
18:4	g	0.000	--	--	0.000	0.000
20:4 undifferentiated	g	0.000	--	--	0.000	0.000
20:5 n-3 (EPA)	g	0.000	--	--	0.000	0.000
22:5 n-3 (DPA)	g	0.000	--	--	0.000	0.000
22:6 n-3 (DHA)	g	0.000	--	--	0.000	0.000
Fatty acids, total trans	g	0.000	--	--	0.000	0.000
Cholesterol	mg	0	--	--	0	0
Amino Acids						
Tryptophan	g	0.221	--	--	0.424	0.027

Nutrient	Unit	1			1 cup 192g	1 tablespoon 12g
		Value Per100 g	Data points	Std. Error		
Threonine	g	0.882	--	--	1.693	0.106
Isoleucine	g	1.065	--	--	2.045	0.128
Leucine	g	1.786	--	--	3.429	0.214
Lysine	g	1.720	--	--	3.302	0.206
Methionine	g	0.210	--	--	0.403	0.025
Cystine	g	0.322	--	--	0.618	0.039
Phenylalanine	g	1.215	--	--	2.333	0.146
Tyrosine	g	0.658	--	--	1.263	0.079
Valine	g	1.223	--	--	2.348	0.147
Arginine	g	1.903	--	--	3.654	0.228
Histidine	g	0.693	--	--	1.331	0.083
Alanine	g	1.029	--	--	1.976	0.123
Aspartic acid	g	2.725	--	--	5.232	0.327
Glutamic acid	g	3.819	--	--	7.332	0.458
Glycine	g	1.002	--	--	1.924	0.120
Proline	g	1.029	--	--	1.976	0.123
Serine	g	1.136	--	--	2.181	0.136
Other						
Alcohol, ethyl	g	0.0	--	--	0.0	0.0
Caffeine	mg	0	--	--	0	0
Theobromine	mg	0	--	--	0	0
Flavonoids						
Flavan-3-ols						
(+)-Catechin 3	mg	0.3	3	0	0.7	0.0
(-)-Epigallocatechin 3	mg	0.0	3	0	0.0	0.0
(-)-Epicatechin 3	mg	0.0	3	0	0.0	0.0
(-)-Epicatechin 3-gallate 3	mg	0.0	3	0	0.0	0.0
(-)-Epigallocatechin 3-gallate 3	mg	0.0	3	0	0.0	0.0
(+)-Galocatechin 3	mg	0.1	3	0	0.3	0.0
Isoflavones						
Daidzein 6 7 8 9 10 11	mg	0.01	9	0.02	0.02	0.00
Genistein 6 7 8 9 10 11	mg	0.05	9	0.12	0.10	0.01
Glycitein 6 11	mg	0.00	3	0	0.00	0.00

Nutrient	Unit	1 Value Per100 g	Data points	Std. Error	1 cup 192g	1 tablespoon 12g
Total isoflavones 6 7 8 9 10	mg	0.06	8	0.14	0.12	0.01
Biochanin A	mg	0.00	4	0	0.01	0.00
Formononetin	mg	0.00	4	0	0.01	0.00
Coumestrol	mg	0.00	4	0	0.00	0.00
Proanthocyanidin						
Proanthocyanidin dimers 4 5	mg	1.2	4	0.29	2.3	0.1
Proanthocyanidin trimers 4 5	mg	0.1	4	0.2	0.2	0.0
Proanthocyanidin 4-6mers 4	mg	0.0	1	--	0.1	0.0

Sources of Data

¹Northern Pulse Growers Association **2011 U.S. Pulse Quality Survey**, 2011 Bismark ND

²Northern Pulse Growers Association **2012 U.S. Pulse Quality Survey**, 2012 Bismark ND

³de Pascual-Teresa, S., Santos-Buelga, C., & Rivas-Gonzalo, J.C. **Quantitative analysis of flavan-3-ols in Spanish foodstuffs and beverages.**, 2000 J. Agric. Food Chem. 48 pp.5331-5337

⁴Bartolome, B., Estrella, I., and Hernandez, T. **Changes in phenolic compounds in lentils (Lens culinaris) during germination and fermentation**, 1997 Z. Lebensm Unters Forsch A. 205 pp.290-294

⁵de Pascual-Teresa, S., Santos-Buelga, C., and Rivas-Gonzalo, J.C. **Quantitative analysis of flavan-3-ols in Spanish foodstuffs and beverages**, 2000 J. Agric. Food Chem. 48 pp.5331-5337

⁶Antonelli, M. L., Faberi, A., Pastorini, E., Samperi, R., and Lagana, A. . **Simultaneous quantification of free and conjugated phytoestrogens in leguminosae by liquid chromatography-tandem mass spectrometry**, 2005 Talanta 66 pp.1025-1033

⁷Horn-Ross, P. L., Barnes, S., Lee, M., Coward, L., Mandel, E., Koo, J., John, E. M., and Smith, M. **Assesing phytoestrogen exposure in epidemiologic studies: development of a database (United States).**, 2000 Cancer Causes and Control 11 pp.289-298

⁸Liggins, J., Bluck, L. J. C., Runswick, C., Atkinson, C., Coward, W. A., and Bingham, S. A. **Daidzein and genistein content of vegetables.**, 2000 Brit. J. Nutr. 84 pp.717-725

⁹Franke, A. A., Custer, L. J., Cerna, C. M., and Narala, K. **Rapid HPLC analysis of dietary phytoestrogens from legumes and from human urine.**, 1995 Proc. Soc. Exp. Biol. Med. 208 pp.18-26

¹⁰Mazur, W.M., Duke, J. A., Whl, k., Rasku, S., and Adlercreutz, H. **Isoflavonoids and lignans in legumes: Nutritional and health aspects in humans.**, 1996 Nutritional Biochemistry 9 pp.193-200

¹¹Pei et al. **Isoflavone content of chickpeas, lentils and dried peas**, 2015 Unpublished data

Langual Code(s)

- A0152 VEGETABLE OR VEGETABLE PRODUCT (US CFR)
- A1286 1600 LEGUMES AND LEGUME PRODUCTS (USDA SR)
- B1268 LENTIL
- C0133 SEED, SKIN PRESENT, GERM PRESENT
- E0150 WHOLE, NATURAL SHAPE
- F0001 EXTENT OF HEAT TREATMENT NOT KNOWN
- G0003 COOKING METHOD NOT APPLICABLE
- H0138 WATER REMOVED
- J0116 DEHYDRATED OR DRIED
- K0003 NO PACKING MEDIUM USED
- M0001 CONTAINER OR WRAPPING NOT KNOWN
- N0001 FOOD CONTACT SURFACE NOT KNOWN
- P0024 HUMAN FOOD, NO AGE SPECIFICATION
- Z0052 RIPE OR MATURE